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Indian Standard

SPECIFICATION FOR METAL CANS FOR *PAN MASALA* AND *ZARDA*

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NEW DELHI 110002

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February 1985

Indian Standard

SPECIFICATION FOR METAL CANS FOR *PAN MASALA* AND *ZARDA*

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(*Continued on page* 9)

Indian Standard

SPECIFICATION FOR METAL CANS FOR *PAN MASALA* AND *ZARDA*

0. FOREWORD

0.1 This Indian Standard was adopted by the Indian Standards Institution on 31 August 1984, after the draft finalized by the Metal Containers Sectional Committee had been approved by the Marine, Cargo Movement and Packaging Division Council.

0.2 Metal cans for *PAN MASALA* and *ZARDA* are widely used in the country. In this specification dimensions of these cans have been rationalized to conserve the raw materials and streamline their production. The use of the blackplate and tinfree steel sheet as an alternate to tinplate has also been suggested in this specification.

0.3 For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test, shall be rounded off in accordance with IS : 2-1960*. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

1. SCOPE

1.1 This standard prescribes the requirement of round metal cans for packing of *PAN MASALA* and *ZARDA*.

2. TERMINOLOGY

2.1 For the purpose of this standard, the definition given in IS : 1394-1984† shall apply.

3. REQUIREMENTS

3.1 Dimensions — The dimensions of the cans for *PAN MASALA* and *ZARDA* for net mass of contents are given in Table 1 and 2 respectively.

---

*Rules for rounding off numerical values (*revised*).

†Glossary of terms relating to metal containers trade (*third revision*).

TABLE 1 DIMENSIONS OF ROUND *PAN MASALA* CANS

(*Clause* 3.1)

Net Mass of Contents	Nominal Internal Diameter of Can	Internal Diameter	Height	Minimum Nominal Sheet Thickness for				
				Body	End	Slip Lid	Ring	Lever Lid
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
g	mm	mm	mm	mm	mm	mm	mm	mm
25	40	40·3 ± 0·1	46 ± 1·5	0·20	0·20	0·20	—	—
	52	52·3 ± 0·1	37 ± 1·5	0·20	0·20	—	0·20	0·20
100	59	59·3 ± 0·1	83 ± 1·5	0·20	0·20	—	0·20	0·20
250	83	83·4 ± 0·1	114 ± 1·5	0·20	0·20	—	0·20	0·20
500	105	105·1 ± 0·2	132 ± 1·5	0·20 0·19 (Beaded)	0·20	—	0·20	0·20
1 000	138	138·4 ± 0·2	154 ± 1·5	0·22 0·21 (Beaded)	0·22	—	0·22	0·20

TABLE 2 DIMENSIONS OF ROUND *ZARDA* CANS

(*Clause* 3.1)

Net Mass of Contents	Nominal Internal Diameter of Can	Internal Diameter	Height	Minimum Nominal Sheet Thickness for				
				Body	End	Slip Lid	Ring	Lever Lid
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
g	mm	mm	mm	mm	mm	mm	mm	mm
10	32	32·3 ± 0·1	60 ± 1·5	0·20	0·22	0·22	—	—
12·5	40	40·3 ± 0·1	46 ± 1·5	0·20	0·20	0·20	—	—
	52	52·3 ± 0·1	37 ± 1·5	0·20	0·20	—	0·20	0·20
25	52	52·3 ± 0·1	75 ± 1·5	0·20	0·20	0·20	—	—
50	59	59·3 ± 0·1	83 ± 1·5	0·20	0·20	0·20	—	—
100	83	83·4 ± 0·1	93 ± 1·5	0·20	0·20	—	0·20	0·20
200	105	105·1 ± 0·2	132 ± 1·5	0·20 0·19 (Beaded)	0·20	—	0·20	0·20

4. MATERIAL

4.1 The components of the cans shall be made from tinplate, tinfree steel sheet or blackplate. The minimum nominal thickness of the sheet shall be as given in Tables 1 and 2. The tolerance allowed on the thickness of the plate shall be as given in IS : 1993-1982*.

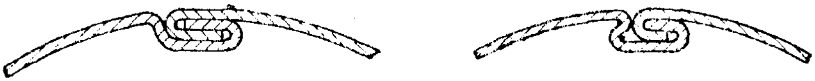
4.2 The tin-coating on tin sheet shall correspond to E 2·8/2·8 as given in Table 1 of IS : 1993-1982* for electrolytic tinplate.

4.3 When the under tagger is required, it shall be made from at least 0·064 mm thick aluminium foil.

5. MANUFACTURE

5.1 Each component shall be made from a single piece of tinplate, tinfree steel sheet or blackplate.

5.2 The body side seam shall be formed as shown in Fig. 1A or 1B without any sealing compound.



SIDE SEAM
1A

MENNEN SIDE SEAM
1B

FIG. 1 SIDE SEAMS

5.3 The bottom and seam shall be either single seam or double seam or clinched as shown in Fig. 2A, 2B or 2C. The cans may also be drawn integral with bottom as shown in Fig. 2D. The height of drawn cans shall be 3 mm less than the height as given in Table 1 or Table 2.

5.4 Top Closures — The cans shall be provided either with the lever lid with ordinary lever ring or slip lid closure as shown in Fig. 3A, 3B or 3C as required by the purchaser.

5.4.1 An aluminium foil tagger may also be used under the ring of the container, crimped with body as shown in Fig. 3A, 3B and 3C.

5.5 The cans shall be new and in clean condition inside and outside and shall be free from rust and foreign matter to contaminate the contents.

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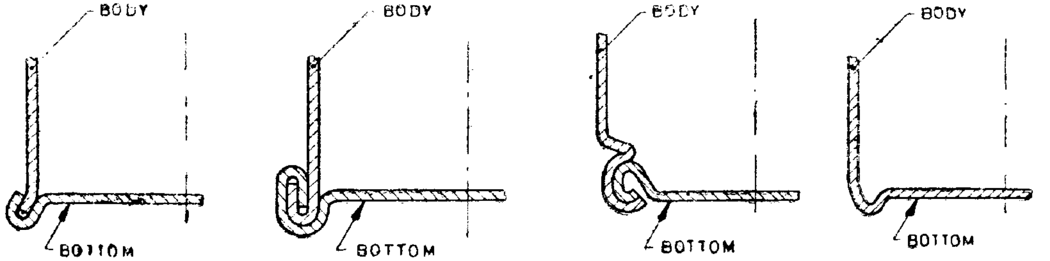
*Specification cold-reduced tinplate and cold-reduced blackplate (*first revision*).



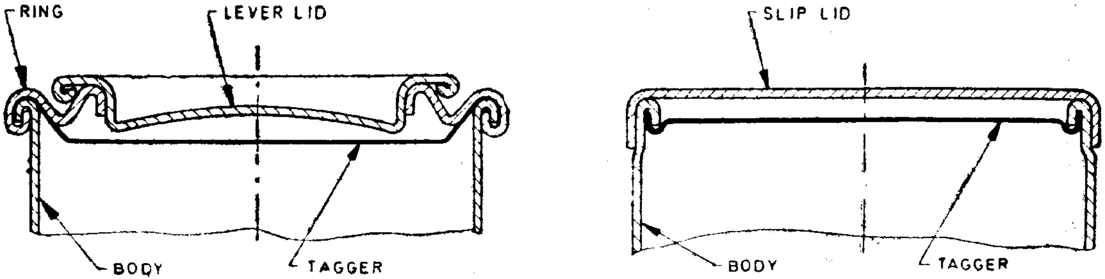
SINGLE SEAM
2A

DOUBLE SEAM
2B

CLINCHED
2C

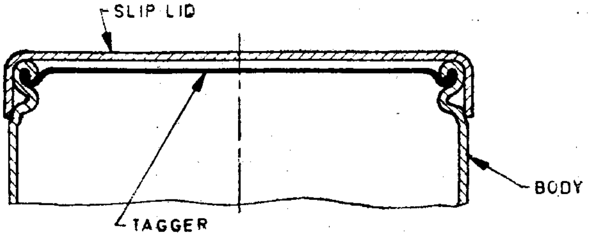
DRAWN INTEGRAL
2D

FIG. 2 BOTTOM END SEAMS



3A Lever Lid Closure with Tagger

3B Slip Lid Closure with Tagger Crimped



3C Slip Lid Closure with Tagger Clinched

FIG. 3 TOP CLOSURES

5.6 Internal Finish — The internal surface of the tinfree steel or blackplate cans shall be lacquered.

5.7 External Finish — The outside surface of the cans shall be given a protective or decorative coating.

6. SAMPLING AND INSPECTION

6.1 Representative, samples for lot inspection shall be drawn in accordance with IS : 3259-1966*.

6.2 The scale of sampling and permissible number of defects for visual characteristics shall be in accordance with Table 1 of IS : 3259-1966*.

7. MARKING

7.1 Each container shall be marked or embossed with information as specified by the purchaser.

7.1.1 The cans may also be marked with the ISI Certification Mark.

NOTE — The use of the ISI Certification Mark is governed by the provisions of the Indian Standards Institution (Certification Marks) Act and the Rules and Regulations made thereunder. The ISI Mark on products covered by an Indian Standard conveys the assurance that they have been produced to comply with the requirements of that standard under a well-defined system of inspection, testing and quality control which is devised and supervised by ISI and operated by the producer. ISI Marked products are also continuously checked by ISI for conformity to that standard as a further safeguard. Details of conditions under which a licence for the use of the ISI Certification Mark may be granted to manufacturers or processors, may be obtained from the Indian Standards Institution.

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*Methods for sampling of metal containers.

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INTERNATIONAL SYSTEM OF UNITS (SI UNITS)

Base Units

QUANTITY	UNIT	SYMBOL
Length	metre	m
Mass	kilogram	kg
Time	second	s
Electric current	ampere	A
Thermodynamic temperature	kelvin	K
Luminous intensity	candela	cd
Amount of substance	mole	mol

Supplementary Units

QUANTITY	UNIT	SYMBOL
Plane angle	radian	rad
Solid angle	steradian	sr

Derived Units

QUANTITY	UNIT	SYMBOL	DEFINITION
Force	newton	N	1 N = 1 kg.m/s^2
Energy	joule	J	1 J = 1 N.m
Power	watt	W	1 W = 1 J/s
Flux	weber	Wb	1 Wb = 1 V.s
Flux density	tesla	T	1 T = 1 Wb/m^2
Frequency	hertz	Hz	1 Hz = 1 c/s (s^{-1})
Electric conductance	siemens	S	1 S = 1 A/V
Electromotive force	volt	V	1 V = 1 W/A
Pressure, stress,	pascal	Pa	1 Pa = 1 N/m^2